

**Amendments to the Specification**

Please replace the paragraph beginning at Page 9, line 10 with the following amended paragraph:

Successful employment of the tool requires that the fiber optic cable be highly flexible and able to withstand the high temperatures encountered downhole. This latter requirement is fulfilled by a thermally protective shielding ~~34~~ 36, as shown in Fig. 4, disposed around the fiber optic cable 18. In accordance with one preferred embodiment of this invention, the shielding is constructed in a manner that allows for twisting and bending. As shown in Fig. 3, the shielding ~~34~~ 36 comprises a subdivided casing ~~34~~ that allows neighboring segments 41 to bend. In an alternative embodiment shown in Fig. 5, shielded fiber optic cable 18 is surrounded by a maneuverable system of interlocking braces 42 connected by free-sliding connectors 40. The maneuverable system, in turn, is surrounded by a flexible outer casing 43 that provides mountings for retractable spherical wheels 19.